(D) Notification. Upon receipt of the regional administrator's determination, the director shall notify the requester that a variance has either been granted or denied.

#### (12) Confidentiality.

- (A) Authorities. Any claim for confidentiality to the control authority must be in accordance with sections 610.010–610.028, RSMo. If no claim is made at the time of submission, the control authority may make the information available to the public without further notice.
- (B) Effluent Data. Information and data provided to the control authority pursuant to this part which is effluent data shall be available to the public without restriction.
- (13) Net/Gross Calculation. Categorical pretreatment standards may be adjusted to reflect the presence of pollutants in accordance with this section.
- (A) Application Deadline and Contents. Any industrial user wishing to obtain a credit for intake pollutants shall make application to the control authority. Upon request of the industrial user, the applicable standard will be calculated on a net basis, that is, adjusted to reflect credit for pollutants in the intake water, if the requirements of subsections (13)(B) and (C) of this rule are met.

## (B) Criteria.

- 1. The industrial user shall demonstrate that the control system it proposes or uses to meet applicable categorical pretreatment standards would, if properly installed and operated, meet the standards in the absence of pollutants in the intake waters.
- 2. Credit for generic pollutants such as biochemical oxygen demand (BOD), total suspended solids (TSS), and oil and grease should not be granted unless the industrial user demonstrates that the constituents of the generic measure in the user's effluent are substantially similar to the constituents of the generic measure in the intake water or unless appropriate additional limits are placed on process water pollutants either at the outfall or elsewhere.
- 3. Credit shall be granted only to the extent necessary to meet the applicable categorical pretreatment standard(s), up to a maximum value equal to the influent value. Additional monitoring may be necessary to determine eligibility for credits and compliance with standard(s) adjusted under this section
- 4. Credit shall be granted only if the user demonstrates that the intake water is drawn from the same body of water as that into which the POTW discharges. The control authority may waive this requirement if it

finds that no environmental degradation will result.

(C) Applicable categorical pretreatment standards shall be applied on a net basis.

#### (14) Upset Provision.

- (A) Definition. For the purposes of this section, upset means an exceptional incident in which there is unintentional and temporary noncompliance with categorical pretreatment standards because of factors beyond the reasonable control of the industrial user. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance or careless or improper operation.
- (B) Effect of an Upset. An upset shall constitute an affirmative defense to an action brought for noncompliance with categorical pretreatment standards if the requirements of subsection (14)(C) are met.
- (C) Conditions Necessary for a Demonstration of Upset. An industrial user who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that—
- 1. An upset occurred and the industrial user can identify the specific cause(s) of the upset:
- 2. The facility was at the time being operated in a prudent and professional manner and in compliance with applicable operation and maintenance procedures; and
- 3. The industrial user has submitted the following information to the POTW and control authority within twenty-four (24) hours of becoming aware of the upset (if this information is provided orally, a written submission shall be provided within five (5) days):
- A. A description of the indirect discharge and cause of noncompliance;
- B. The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and
- C. Steps being taken, planned to reduce, or both, eliminate and prevent recurrence of the noncompliance.
- (D) Burden of Proof. In any enforcement proceeding the industrial user seeking to establish the occurrence of an upset shall have the burden of proof.
- (E) User Responsibility in Case of Upset. The industrial user shall control production on all discharges to the extent necessary to maintain compliance with categorical pretreatment standards upon reduction, loss or failure of its treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement

applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost or fails.

### (15) Bypass.

- (A) Definitions.
- 1. Bypass means the intentional diversion of wastestreams from any portion of an industrial user's treatment facility.
- 2. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (B) Bypass Not Violating Applicable Pretreatment Standards or Requirements.
- 1. An industrial user may allow any bypass to occur which does not cause pretreatment standards or requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of subsections (15)(C) and (D) of this rule.

## (C) Notice.

- 1. If an industrial user knows in advance of the need for a bypass, it shall submit prior notice to the control authority, if possible, at least ten (10) days before the date of the bypass.
- 2. An industrial user shall submit oral notice of an unanticipated bypass that exceeds applicable pretreatment standards to the control authority within twenty-four (24) hours from the time the industrial user becomes aware of the bypass or should have become aware. A written submission shall also be provided within five (5) days of the time the industrial user becomes aware of the bypass. The written submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the bypass. The control authority may waive the written report on a case-by-case basis if the oral report has been received within twenty-four (24) hours.
  - (D) Prohibition of Bypass.
- 1. Bypass is prohibited, and the control authority may take enforcement action against an industrial user for a bypass, unless—
- A. The bypass was unavoidable to prevent loss of life, bodily injury or severe property damage;

- B. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment could have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
- C. The industrial user submitted notices as required under subsection (15)(C) of this rule.
- 2. The control authority may approve an anticipated bypass, after considering its adverse effects, if the control authority determines that it will meet the three (3) conditions listed in paragraph (15)(D)1. of this rule.
- (16) Modification of POTW Pretreatment Programs.
- (A) General. Either the director or a POTW with an approved POTW pretreatment program may initiate a program modification at any time to reflect changing conditions at the POTW. A program modification is necessary whenever there is a significant change in the operation of a POTW pretreatment program that differs from the information in the POTW's submission, as approved under section (9).
- (B) Procedures. POTW pretreatment program modifications shall be accomplished as follows:
- 1. For substantial modifications, as defined in subsection (16)(C) of this rule—
- A. The POTW shall submit to the director a statement of the basis for the desired modification, a modified program description, or such other documents the director determines necessary under the circumstances;
- B. The director shall approve or disapprove the modification based on the requirements of subsection (7)(E), following the procedures in subsections (9)(B)–(E);
- C. The modification shall be incorporated into the POTW's state operating permit after approval. The permit shall be modified to incorporate the approved modification; and
- D. The modification shall become effective upon approval by the director; and
- 2. The POTW shall notify the director of any other (that is, nonsubstantial) modifications to its pretreatment program at least thirty (30) days prior to when they are to be implemented by the POTW, in a statement similar to that provided for in subparagraph (16)(B)1.A. of this rule. Such nonsubstantial program modifications shall be deemed to be

approved by the director unless the director determines that a modification submitted is in fact a substantial modification, ninety (90) days after the submission of the POTW's statement. Following such approval by the director, such modifications shall be incorporated into the POTW's permit. If the director determines that a modification reported by a POTW in its statement is in fact a substantial modification, the director shall notify the POTW and initiate the procedures in paragraph (16)(B)1. of this rule.

- (C) Substantial Modifications.
- 1. The following are substantial modifications for the purposes of this rule:
- A. Changes in the POTW's legal authorities;
- B. Changes to local limits, which result in less stringent local limits;
- C. Change to the POTW's control mechanism, as described in subparagraph (7)(E)1.C.;
- D. Changes to the POTW's method for implementing categorical pretreatment standards (for example, incorporation by reference, separate promulgation, etc.);
- E. A decrease in the frequency of self-monitoring or reporting required of industrial users;
- F. A decrease in the frequency of industrial user inspections or sampling by the POTW;
- G. Changes to the POTW's confidentiality procedures;
- H. Significant reductions in the POTW's pretreatment program resources (including personnel commitments, equipment, and funding levels); and
- I. Changes in the POTW's sludge disposal and management practices.
- 2. The director may designate other specific modifications, in addition to those listed in paragraph (16)(C)1. of this rule, as substantial modifications.
- 3. A modification that is not included in paragraph (16)(C)1. of this rule is nonetheless a substantial modification for purposes of this rule if the modification—
- A. Would have a significant impact on the operation of the POTW's pretreatment program;
- B. Would result in an increase in pollutant loadings at the POTW; or
- C. Would result in less stringent requirements being imposed on industrial users of the POTW.

AUTHORITY: section 644.041, RSMo 1994.\* Original rule filed Feb. 1, 1988, effective June 13, 1988. Amended: Filed March 1, 1996, effective Nov. 30, 1996.

\*Original authority 1972, amended 1973, 1987.

#### 10 CSR 20-6.200 Storm Water Regulations

PURPOSE: This rule sets forth the requirements and process of application for permits for storm water discharges and the terms and conditions for the permits.

Editor's Note: The secretary of state has determined that the publication of this rule in its entirety would be unduly cumbersome or expensive. The entire text of the material referenced has been filed with the secretary of state. This material may be found at the Office of the Secretary of State or at the head-quarters of the agency and is available to any interested person at a cost established by law.

## (1) Storm Water Permits—General.

- (A) All persons who operate, use, disturb land, maintain existing storm water point sources or before beginning any construction which would result in a storm water point source shall apply to the department for the permits required by the Missouri Clean Water Law and these regulations. The department issues these permits in order to enforce the Missouri Clean Water Law and regulations and administer the state operating permit program.
- (B) Nothing shall prevent the department from taking action, including the requirement for issuance of any permits under the Missouri Clean Water Law and regulations, if any of the operations exempted should cause pollution of waters of the state or otherwise violate the Missouri Clean Water Law or these regulations. The following are exempt from storm water permit regulations:
- 1. Discharges from facilities or activities excluded from the state operating permit program under 10 CSR 20-6.010(1)(B);
- 2. Areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots, as long as the drainage from the excluded areas is not mixed with storm water drained from permitted areas;
- 3. *De minimis* discharges as defined by the department in general permits or by the Clean Water Commission;
- 4. Recycling collection points which are covered in a manner which prevents contact with storm water, including run on;
- 5. Farmlands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility producing the sludge;
- 6. Agricultural storm water discharges and irrigation return flows;
- 7. Sites that disturb less than five (5) acres of total land area which are not part of

- a common plan or sale. Land disturbance activity on an individual residential building lot is not considered as part of the overall subdivision unless the activity is by the developer to improve the lot for sale;
- 8. Linear, strip or ribbon construction or maintenance operations meeting one (1) of the following criteria:
- A. Grading of existing dirt or gravel roads which does not increase the runoff coefficient and the addition of an impermeable surface over an existing dirt or gravel road:
- B. Cleaning or routine maintenance of roadside ditches, sewers, waterlines, pipelines, utility lines or similar facilities;
- $\mbox{C.}$  Trenches two feet (2') in width or less; or
- D. Emergency repair or replacement of existing facilities as long as best management practices are employed during the emergency repair;
- 9. Mowing, brush hog clearing, tree cutting or similar activities which do not grade, dig, excavate or otherwise remove or kill the surface growth and root system of the ground cover:
- 10. Landfills which have received Missouri Department of Natural Resources approval to close and which are in compliance with any post-closure monitoring, management requirements and deed restrictions, unless the department determines the facility is a significant discharger of storm water related pollutants; and
- 11. Facilities built to control the release of only storm water are not subject to the construction permitting requirement of 10 CSR 20-6.010(4), provided that the storm water does not come in contact with process waste, process wastewater or significant materials, and the storm water is not a significant contributor of pollutants.
  - (C) Definitions.
- 1. Best management practices (BMPs). Schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal or drainage from raw material storage.
- 2. BMPs for land disturbance. A schedule of activities, practices or procedures that reduces the amount of soil available for transport or a device that reduces the amount of suspended solids in runoff before discharge to waters of the state. Types of BMPs for storm water control include, but are not limited to:

- A. State-approved standard specifications and permit programs;
- B. Employee training in erosion control, material handling and storage and housekeeping of maintenance areas;
- C. Site preparation such as grading, surface roughening, topsoiling, tree preservation and protection, and temporary construction entrances:
- D. Surface stabilization such as temporary seeding, permanent seeding, mulching, sodding, ground cover including vines and shrubs, riprap and geotextile fabric. Mulches may be hay, straw, fiber mats, netting, wood cellulose, corn or tobacco stalks, bark, corn cobs, wood chips or other suitable material which is reasonably clean and free of noxious weeds and deleterious materials. Grasses used for temporary seeding shall be a quick growing species such as rye grass, Italian rye grass or cereal grasses suitable to the area and which will not compete with the grasses sown later for permanent cover;
- E. Runoff control measures such as temporary diversion dikes or berms, permanent diversion dikes or berms, right-of-way or perimeter diversion devices, and retention and detention basins. Sediment traps and barriers, sediment basins, sediment (silt) fence and staked straw bale barriers;
- F. Runoff conveyance measures such as grass-lined channels, riprap and paved channels, temporary slope drains, paved flumes or chutes. Slope drains may be constructed of pipe, fiber mats, rubble, Portland cement concrete, bituminous concrete, plastic sheets or other materials that adequately will control erosion;
  - G. Inlet and outlet protection;
- H. Streambank protection such as a vegetative greenbelt between the land disturbance and the watercourse. Also, structural protection which stabilizes the stream channel:
- I. A critical path method analysis or a schedule for performing erosion control measures; and
- J. Other proven methods for controlling runoff and sedimentation.
- 3. Copetitioner. A person with apportioned legal, financial and administrative responsibility based on land area under its control for filing Parts 1 and 2 of a state operating permit for the discharge of storm water from municipal separate storm sewer systems. A copetitioner becomes a copermittee once the permit is issued.
- 4. Copermittee. A permittee to a state operating permit that is responsible only for permit conditions relating to the discharge for which it is owner or operator, or both.

- 5. *De minimis* water contaminant source. A water contaminant source, point source or wastewater treatment facility that is determined by the department to pose a negligible potential impact on waters of the state even in the event of the malfunction of wastewater treatment controls or material handling procedures.
- Field screening point. A specific location which during monitoring will provide representative information to indicate the presence of illicit connections or illegal dumping and quality of water within a municipal separate storm sewer system.
- 7. Illicit discharge. Any discharge to a municipal separate storm sewer that is not composed entirely of storm water, except discharges pursuant to a state operating permit, other than storm water discharge permits and discharges from fire fighting activities.
- 8. Incorporated place (in Missouri, a municipality). A city, town or village that is incorporated under the laws of Missouri.
- 9. Landfill. Location where waste materials are deposited on or buried within the soil or subsoil. Included are open dumps and landfills built or operated, or both, prior to the passage of the Missouri Solid Waste Management Law as well as those built or operated, or both, since.
- 10. Large municipal separate storm sewer system. All municipal separate storm sewers that are either—
- A. Located in an incorporated place with a population of two hundred fifty thousand (250,000) or more;
- B. Located in the counties designated by the director as unincorporated places with significant urbanization and identified systems of municipal separate storm sewers;
- C. Owned and operated by a municipality other than those described in subparagraph (1)(C)10.A. of this rule that are designated by the director as part of a system. In making this determination, the director may consider the following factors:
- (I) Physical interconnections between the municipal separate storm sewers;
- (II) The location of discharges from the designated municipal storm sewer relative to the discharges from municipal separate storm sewer described in subparagraph (1)(C)10.A. of this rule;
- (III) The quantity and nature of pollutants discharged to the waters of the state;
- (IV) The nature of the receiving waters: or
  - (V) Other relevant factors; and
- D. The director, upon petition, may designate as a large municipal separate storm

sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed or other appropriate basis that includes one (1) or more of the systems described in subparagraph (1)(C)10.A. of this rule.

- 11. Major municipal separate storm sewer system outfall (major outfall). A municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of thirty-six inches (36") or more (or its equivalent) or for municipal separate storm sewers that receive storm waters from lands zoned for industrial activity within the municipal separate storm sewer system with an outfall that discharges from a single pipe with an inside diameter of twelve inches (12") or more (or from its equivalent). Industrial activity areas do not include commercial areas.
- 12. Major outfall. A major municipal separate storm sewer outfall.
- 13. Major structural controls. Manmade retention basins, detention basins, major infiltration devices or other structures designed and operated for the purpose of containing storm water discharges from an area greater than or equal to fifty (50) acres.
- Medium municipal separate storm sewer system. All municipal separate storm sewers that are either—
- A. Located in an incorporated place with a population of one hundred thousand (100,000) or more but less than two hundred fifty thousand (250,000), as determined by the latest decennial census by the Bureau of Census; or
- B. Owned and operated by a municipality other than those described in subparagraph (1)(C)14.A. of this rule and that are designated by the director as part of the system. In making this determination, the director may consider the following factors:
- (I) Physical interconnections between the municipal separate storm sewers;
- (II) The locations of discharges from the designated municipal separate storm sewer relative to discharges from the municipal separate storm sewers described in subparagraph (1)(C)14.A. of this rule;
- (III) The quantity and nature of pollutants discharged to waters of the state;
- (IV) The nature of the receiving waters:
  - (V) Other relevant factors; or
- (VI) The director, upon petition, may designate as a medium municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdic-

tional watershed, or other appropriate basis that includes one (1) or more of the systems described in subparagraph (1)(C)14.A. of this rule.

- 15. Municipal separate storm sewer means a conveyance or system of conveyances including roads and highways with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, paved or unpaved channels or storm drains designated and utilized for routing of storm water which—
- A. Does not include any waters of the state as defined in this rule:
- B. Is contained within the municipal corporate limits or is owned and operated by the state, city, town, village, county, district, association or other public body created by or pursuant to the laws of Missouri having jurisdiction over disposal of sewage, industrial waste, storm water or other liquid wastes;
- C. Is not a part or portion of a combined sewer system; and
- D. Is not a part of a publicly owned treatment works as defined in 40 CFR 122.2.
- 16. Operator. The owner, or an agent of the owner, of a separate storm sewer with responsibility for operating and maintaining the effectiveness of the system.
- 17. Outfall. A point source as defined by 10 CSR 20-2.010 at the point where a municipal separate storm sewer discharges and does not include open conveyances connecting two (2) municipal separate storm sewers, pipes, tunnels or other conveyances which connect segments of waters of the state and are used to convey waters of the state.
- 18. Overburden. Any material of any nature consolidated or unconsolidated that overlays a mineral deposit excluding top soil or similar naturally occurring surface materials that are not disturbed by mining operations.
- 19. Owner. A person who owns and controls the use, operation and maintenance of a separate storm sewer.
- 20. Process wastewater. Any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct or waste product.
- 21. Receiving waters. Waters of the state as defined in this rule.
- 22. Recycling facilities. Locations where metals, paper, tires, glass, organic materials, used oils, spent solvents or other materials are collected for reuse, reprocessing or resale.
- 23. Runoff coefficient. The fraction of total rainfall that will appear at a conveyance as runoff.

- 24. Significant contributor of pollutants. A person who discharges or causes the discharge of pollutants in storm water which can cause water quality standards of the waters of the state to be violated.
- 25. Significant material or activity associated with industrial activity.
- A. For the categories of industries identified in subsections (2)(A)–(D) of this rule, the term includes, but is not limited to, storm water discharged from industrial plant yards, immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material or byproducts used or created by the facility.
- B. Significant materials include, but are not limited to: raw materials; fuels; materials such as solvents, detergents and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of the Comprehensive Environmental Response, Compensation, Liability Act of 1980 (CERCLA); any chemical the facility is required to report pursuant to Section 313 of Title III of Superfund Amendments & Reauthorization Act of 1986 (SARA); fertilizers; and pesticides and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.
- C. Material received in drums, totes or other secure containers or packages which prevent contact with storm water, including run on, are exempted from the significant materials classification until the container has been opened for any reason. If the container is moved into a building or other protected area prior to opening, it will not become a significant material.
- D. Empty containers which have been properly triple rinsed are not significant materials.
- 26. Storm water means storm water runoff, snow melt runoff and surface runoff, and drainage.
- 27. Storm water discharge associated with industrial activity means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw material storage areas at an industrial plant.
- 28. Waters of the state, as it applies to large and medium municipalities under this regulation, means all waters listed as L1, L2 and L3 in Tables G and P, P1 and C in Table H of 10 CSR 20-7.031.
- (2) Storm water discharge associated with industrial activity. The discharge from any conveyance which is used for collecting and

conveying storm water which is not under a permit issued under 10 CSR 20-6.010 and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant.

- (A) For the listed industries identified in subsection (2)(B) of this rule, the term includes, but is not limited to: storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material or by-products used or created by the facility; material handling sites; sites used for the application or disposal of process wastewaters; sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials and intermediate and finished products unless material is in closed cars or trailers and the loading/unloading operation does not expose material to storm water or otherwise pose risk of storm water contamination and areas where industrial activity has taken place in the past and where significant materials remain and are exposed to storm water.
- (B) Industries subject to this requirement include:
- 1. Facilities classified with the following primary standard industry classification (SIC) are considered to be included in this paragraph: 10, Metal Mining; 12, Coal Mining; 13, Oil and Gas Extraction; 14, Nonmetallic Minerals; 24, Lumber and Wood Products; 26, Paper and Allied Products; 28, Chemical and Allied Products; 29, Petroleum Refining; 311, Leather Tanning and Finishing; 32, Stone, Clay, Glass, Concrete; 33, Primary Metal Industries; 3441, Fabricated Structural Metal; 373 Ship and Boat Building and Repair; and industries regulated under section 644.052.4, RSMo except for those SICs addressed in paragraph (2)(B)4. of this rule;
- 2. Facilities classified with the following primary SIC are considered to be included in this paragraph: 40, Railroad; 41, Local, Suburban Transit, etc.; 42, Motor Freight Transportation and Warehousing; 43, United States Postal Service; 44, Water Transportation; 45, Air Transportation; Petroleum Bulk Station, Terminal—only those portions of the facility listed under this paragraph that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication) equipment cleaning operations, airport deicing operations or which are otherwise identified under paragraph (2)(B)1., 3. or 4. of this rule are associated with industrial activity;

- 3. Facilities which meet the following definitions are considered to be included in this subsection:
- A. Hazardous waste treatment, storage or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of the Resource Conservation and Recovery Act (RCRA). Hazardous waste generator sites which are exempt from interim status or permitting because they accumulate wastes on-site less than ninety (90) days are not included;
- B. Landfills, land application sites and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this paragraph) including those that are subject to regulation under Subtitle D of RCRA;
- C. Facilities involved in the recycling of materials including metal scrap yards, battery re-claimers, salvage yards and automobile junk yards, including, but not limited to, those with an SIC of 5015 and 5093;
- D. Steam electric power generating facilities, including coal handling sites;
- E. Treatment works treating domestic sewage, or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that is located within the confines of the facility, with a design flow of 1.0 million gallons per day (mgd) or more or required to have an approved pretreatment program under 10 CSR 20-6.100; and
- F. Industrial facilities that are federally, state or municipally owned or operated; and
- 4. Facilities classified with the following primary SIC are considered to be included in this paragraph: 20, Food and Kindered Products; 21, Tobacco Products; 22, Textile Mill Products: 23. Apparel and Other Finished Products; 2434, Wood Kitchen Cabinets; 25, Furniture and Fixtures; 265, Paperboard Containers and Boxes; 267, Converted Paper and Paperboard Products; 27, Printing, Publishing and Allied Industries; 283, Drugs; 285, Paints, Varnishes, Lacquers and Enamels; 30, Rubber and Miscellaneous Plastics; 31, Leather and Leather Products (except for 311); 323, Glass Products; 34, Fabricated Metal Products (except for 3441); 35, Industrial and Commercial Machinery; 36, Electronic and Other Electrical Equipment; 37, Transportation Equipment (except for 373); 38, Measuring, Analyzing and Controlling Instruments; 39, Miscellaneous Manufacturing Industries; 4221-25, Public Warehousing and Storage, only if any of the following activities and materials listed are exposed to

- storm water: discharges from industrial plant yards; material handling sites; sites used for the application or disposal of any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct or waste product: sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water.
- (C) Application Requirements for Storm Water Discharges Associated With Industrial Activity.
- 1. Individual application. Dischargers of storm water associated with industrial activity shall apply for an individual permit or seek coverage under a promulgated storm water general permit. Facilities that are required to obtain an individual permit, or any discharge of storm water which the director is evaluating for designation under this paragraph and is not a municipal separate storm sewer, shall submit a state operating permit application in accordance with the following requirements:
- A. A site plan map showing topography or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable of the facility including: facility property line, each of its drainage and discharge structures, the drainage area of each storm water outfall, paved areas and buildings within the drainage area of each storm water outfall that drain to a storm water outfall, and those that do not drain to a storm water outfall, each past or present area used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied, each of its hazardous waste treatment, storage or disposal facilities (including each area not required to have an RCRA permit which is used for accumulating hazardous waste under 10 CSR 25-5.262; each well where fluids from the facility are injected underground; springs and sink holes and other surface water bodies which receive storm water discharges from the facility;
- B. An estimate of the area of impervious surfaces (including paved areas and building roofs) and the total area drained by each outfall, if known, and a narrative

description of the following: significant materials that in the three (3) years prior to the tion form; submittal of this application have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage or disposal of materials; materials management practices employed in the tion; and three (3) years prior to the submittal of this application to minimize contact by these

are applied; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff: and a description of the treatment the storm water receives, including the ultimate disposal of any solid or fluid waste other than by discharge; C. A certification that all outfalls that should contain storm water discharges associ-

materials with storm water runoff; materials

loading and access areas; outdoor vehicle

maintenance and cleaning areas; the location,

manner and frequency in which pesticides,

herbicides, soil conditioners and fertilizers

- ated with industrial activity have been tested or evaluated for the presence of nonstorm water discharges which are not covered by a state operating permit. Tests for nonstorm water discharges may include smoke tests and dye tests as well as other appropriate tests or analysis. The certification shall include a description of the method used, the date of any testing and the on-site drainage points that directly were observed during a test;
- D. Existing information regarding significant leaks or spills of toxic or hazardous pollutants at the facility that have taken place within the three (3) years prior to the submittal of this application;
- E. Quantitative data based on samples collected during storm events from all outfalls containing a storm water discharge associated with industrial activity shall be submitted. When an applicant has two (2) or more outfalls that are similar in nature, an individual outfall can be designated as representative and samples only collected from the representative outfall. Quantitative data will be submitted for the following parameters:
- (I) Any pollutant limited in an effluent guideline to which the facility is subiect:
- (II) Any pollutant listed in the facility's state operating permit for its process wastewater (if the facility is operating under an existing state operating permit);
- (III) Oil and grease, pH, biochemical oxygen demands (BOD<sub>5</sub>), chemical oxygen demands (COD), total suspended solids (TSS), conductivity, total phosphorus, total Kjeldahl nitrogen and nitrate plus nitrite nitrogen;
  - (IV) Any information on the dis-

charge required by the appropriate applica-

- (V) Flow measurements or estimates of the flow rate, the total amount of discharge for the storm event(s) sampled and the method of flow measurement or estima-
- (VI) The date and duration (in hours) of the storm event(s) sampled, rainfall measurements of the storm event which generated the sampled runoff and the duration between the storm event sampled and the end of the previous measurable (greater than onetenth inch (0.1") rainfall) storm event (in hours), at least one-tenth inch (0.1") of rainfall per storm water event are required to be considered a valid storm water event. The reporting rainfall station, if possible, should be within one (1) mile of the sampled outfall and shall be capable of providing rainfall measurements in at least tenths of an inch;
- F. Sampling and flow measurements or estimates shall be made to assess both the initial discharge loading and the total loading through the outfall during the measured rainfall event. A grab sample shall be taken within the first sixty (60) minutes of discharge. Sampling shall continue at the frequency of at least one (1) sample each sixty (60)-minute period. Sampling should continue for three (3) hours or until discharge ceases, whichever is first. A sample aliquot representing the initial discharge shall be analyzed separate from the event composite sample. The composite sample shall include an aliquot from the initial discharge sample. The composite sample should be flow-weighted using approved procedures. Samples shall be collected, preserved and analyzed according to 40 CFR, Part 136 or other methods approved by the department. When analysis is required, grab samples must be used for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform and fecal streptococcus;
- G. Applicants shall provide other information the director reasonably may require to determine whether to issue a permit: and
- H. Within one (1) year after commencement of discharge, operators of new sources or new discharges which are composed in part or entirely of storm water must include estimates for the pollutants or parameters listed in subparagraph (2)(C)1.E. of this rule, unless this data has already been reported under the monitoring requirements of the state operating permit for the discharge.
- 2. The operator of an existing or new discharge composed entirely of storm water from an oil or gas exploration, production, processing or treatment operation, or trans-

mission facility is not required to submit a permit application in accordance with paragraph (2)(C)1. of this rule, unless the facility-

- A. Has a discharge which is contaminated by contact with, or that has come into contact with, any overburden, raw materials, intermediate products, finished product, byproduct or waste products located on the site of the operation;
- B. Has had a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required at any time since November 16, 1987;
- C. Contributes to a violation of a water quality standard.
- 3. The operator of an existing or new discharge composed entirely of storm water from a mining operation is not required to submit a permit application unless the discharge has come into contact with any overburden, raw material, intermediate products, finished product, by-product or waste products located on the site of the operations.
- (3) Land Disturbance.
- (A) The owner/operator of an existing or new storm water discharge from a land disturbance activity shall provide a narrative description of-
- 1. The location (including a map) and the nature of the construction activity;
- 2. The total area of the site and the area of the site that is expected to undergo excavation during the life of the permit;
- 3. Proposed measures, including BMPs, to control pollutants in storm water discharges during construction, including a brief description of applicable state and local erosion and sediment control requirements;
- 4. Proposed measures to control pollutants in storm water discharges that will occur after construction operations have been completed, including a brief description of applicable state or local erosion and sediment control requirements;
- 5. An estimate of the runoff coefficient of the site and the increase in impervious area after the construction addressed in the permit application is completed, the nature of fill material and existing data describing the soil or the quality of the discharge; and
  - 6. The name of the receiving water.
- (B) Land Disturbance Activity. Storm water permits shall be the responsibility of the owner/operator of the site. The owner/operator is responsible to see that all contractors comply with the requirements of the permit.
- 1. Applications for new storm water permits or the renewal of storm water permits

must be received at least ninety (90) days before the date construction operations begin or the expiration date of the present operating permit.

- (4) Application requirements for large and medium municipal separate storm sewer discharges. The owner and operator of a discharge from a large or medium municipal separate storm sewer or a municipal separate storm sewer that is designated by the director under paragraph (1)(C)10. of this rule may submit a jurisdiction- or system-wide permit application. Where more than one (1) public entity owns and operates a municipal separate storm sewer within a geographic area, including adjacent or interconnected municipal separate storm sewer systems, the owners and operators may be copetitioners to the same application. A public entity which does not participate as a copetitioner with the municipal entity designated as having overall authority over storm water discharges may be required by the director to submit a separate application for its area of responsibility. Permit applications for discharges from large and medium municipal storm sewers or municipal storm sewers designated under paragraph (1)(C)14. of this rule shall include:
- (A) Part 1 of the application shall consist of—
- 1. General information. The applicant's name, address, telephone number of contact person, ownership and operator status, and status as a state or local government entity;
- 2. Legal authority. A description of existing legal authority to control discharges to the municipal separate storm sewer system. When existing legal authority is not sufficient to meet the criteria provided in paragraph (4)(B)1. of this rule, the description shall list additional authorities as will be necessary to meet the criteria and shall include a schedule and commitment to seek the additional authority that will be needed to meet the criteria;
  - 3. Source identification.
- A. A description of the historic use of ordinances, guidance or other controls which limit the discharge of nonstorm water discharges to any publicly-owned treatment works serving the same area as the municipal separate storm sewer system.
- B. A United States Geological Survey seven and one-half (7.5) minute topographic map (or equivalent topographic map with a scale between 1:10,000 and 1:24,000 if cost effective) extending one (1) mile beyond the service boundaries of the municipal storm sewer system covered by the permit application. The following information shall be provided:

- (I) The location of known municipal storm sewer system outfalls discharging to waters of the state;
- (II) A description of the land-use activities (for example, divisions indicating undeveloped, residential, commercial, agricultural and industrial uses) accompanied with estimates of population densities and projected growth for a ten (10)-year period within the drainage area served by the separate storm sewer. An estimate of an average runoff coefficient shall be provided for each land use type;
- (III) The location and a description of the activities of the facility of each currently operating or closed municipal landfill or other treatment, storage or disposal facility for municipal waste;
- (IV) The location and the permit number of any known discharge to the municipal storm sewer that has been issued a state operating permit;
- (V) The location of major structural controls for storm water discharge (retention basins, detention basins, major infiltration devices, etc.); and
- (VI) The identification of publiclyowned parks, recreational areas and other open lands;
  - 4. Discharge characterization.
- A. Monthly mean rain and snowfall estimates (or summary of weather bureau data) and the monthly average number of storm events.
- B. Existing quantitative data describing the volume and quality of discharges from the municipal separate storm sewer, including a description of the major outfalls sampled, sampling procedures and analytical methods used:
- C. A list of water bodies that receive discharges from the municipal separate storm sewer system, including downstream segments, groundwater, lakes and wetlands where pollutants from the system discharges may accumulate and cause water degradation and a brief description of known water quality impacts. At a minimum, the description of impacts shall include a description of whether the water bodies receiving discharges have been:
- (I) Assessed and reported in Section 305(b) reports submitted by the state, the basis for the assessment (evaluated or monitored), a summary of designated use support and attainment of Clean Water Act (CWA) goals (fishable and swimable waters) and causes of nonsupport of designated uses;
- (II) Listed under Section 304(l) of the CWA that is not expected to meet water quality standards or water quality goals;

- (III) Listed in state Nonpoint Source Assessments required by Section 319(a) of the CWA that, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain water quality standards due to storm sewers, construction, highway maintenance and runoff from municipal landfills and municipal sludge adding significant pollution (or contributing to a violation of water quality standards);
- (IV) Identified and classified according to eutrophic condition of publicly-owned lakes listed in state reports required under Section 314(a) of the CWA including the following: A description of those publicly-owned lakes for which uses are known to be impaired; a description of procedures, processes and methods to control the discharge of pollutants from municipal separate storm sewers into those lakes and a description of methods and procedures to restore the quality of those lakes;
- (V) Recognized by the applicant as highly valued or sensitive waters;
- (VI) Defined by the state or United States Fish and Wildlife Service's National Wetlands Inventory as wetlands; and
- (VII) Found to have pollutants in bottom sediments, fish tissue or biosurvey data.
- D. Field screening. Results of a field screening analysis for illicit connections and illegal dumping for either selected field screening points or major outfalls covered in the permit application. At a minimum, a screening analysis shall include a narrative description, for either each field screening point or major outfall, of visual observations made during dry weather periods. If any flow is observed, two (2) grab samples shall be collected during a twenty-four (24)-hour period with a minimum period of four (4) hours between samples. For all these samples, a narrative description of the color, odor, turbidity, presence of an oil sheen or surface scum as well as any other relevant observations regarding the potential presence of nonstorm water discharges or illegal dumping shall be provided. In addition, a narrative description of the results of a field analysis using suitable methods to estimate pH, total chlorine, total copper, total phenol and detergents (or surfactants) shall be provided along with a description of the flow rate. Where the field analysis does not involve analytical methods approved under 10 CSR 20-7.015, the applicant shall provide a description of the method used, including the name of the manufacturer of the test method along with the range and accuracy of the test. Field

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screening points shall be major outfalls, other outfall points, manholes, junctions of storm drainage ditches etc., located throughout the storm sewer system by one (1) of the following two (2) methods:

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- (I) Field screening points shall be located randomly throughout the storm sewer system by placing a grid over a drainage system map and identifying those cells of the grid which contain a segment of the storm sewer system or major outfall. For the use of this method, the field screening points shall be established using the following guidelines and criteria:
- (a) A grid system consisting of perpendicular north-south and east-west lines spaced one-quarter (1/4) mile apart shall be overlaid on a map of the municipal storm sewer system creating a series of cells;
- (b) All cells that contain a segment of the storm sewer system shall be identified. One (1) field screening point shall be selected in each cell (not to exceed the number required in subpart (4)(A)4.D.(I)(f)). Major outfalls may be used as field screening points;
- (c) Field screening points should be located downstream of any sources of suspected illegal or illicit activity;
- (d) Field screening points shall be located to the degree practicable at the farthest manhole or other accessible location downstream in the system within each cell. However, safety of personnel and accessibility of the location should be considered in making this determination;
- (e) Hydrological conditions, total drainage area of the site, population density of the site, traffic density, age of the structures or buildings in the area, history of the area and land-use types;
- (f) For medium municipal separate storm sewer systems, no more than two hundred fifty (250) cells need to have identified field screening points. In large municipal separate storm sewer systems, no more than five hundred (500) cells need to have identified field screening points. Cells established by the grid that contain no storm sewer segments will be eliminated from consideration. If fewer than two hundred fifty (250) cells in medium municipal sewers are created, and fewer than five hundred (500) in large systems are created by the overlay on the municipal sewer map, then all those cells which contain a segment of the sewer system shall be subject to field screening unless access to the separate storm sewer system is impossible: and
- (g) Large or medium municipal separate storm sewer systems which are unable to utilize the procedures described in

part (4)(A)4.D.(I) of this rule because a sufficiently detailed map of the separate storm sewer systems is unavailable shall field screen no more than five hundred (500) or two hundred fifty (250) major outfalls respectively (or all major outfalls in the system, if fewer). In these circumstances, the applicant shall establish a grid system consisting of northsouth and east-west lines spaced one-quarter (1/4) mile apart as an overlay to the boundaries of the municipal storm sewer system, thereby creating a series of cells. The applicant will then select major outfalls in as many cells as possible until at least five hundred (500) major outfalls (large municipalities) or two hundred fifty (250) major outfalls (medium municipalities) are selected. A field screening analysis shall be undertaken at these major outfalls; or

- (II) Field screening points shall be located throughout the storm sewer system by the establishment of watersheds for both conduit and open drainage conveyance systems. The drainage system shall be indicated on a drainage system map along with the identification of the appropriate watershed boundaries. For the use of this method, the applicant, with the approval of the director, may develop the runoff characteristics of each land area contributing to a sampling point by utilizing best engineering judgment and current hydrologic analysis methodologies. The proposal shall be submitted to the department as an attachment to the Part 1 storm water permit application required by this regula-
- E. Characterization plan. Information and a proposed program to meet the requirements of paragraph (4)(B)3. of this rule. The description shall include the location of outfalls or field screening points appropriate for representative data collection under paragraph (4)(B)3. of this rule, a description of why the outfall or field screening point is representative, the seasons during which sampling is intended and a description of the sampling equipment. The proposed location of outfalls or field screening points for sampling should reflect water quality concerns to the extent practicable;

# 5. Management programs.

A. A description of the existing management programs to control pollutants from the municipal separate storm sewer system. The description shall provide information on existing structural and source controls, including operation and maintenance measures for structural controls that are currently being implemented. These controls may include, but are not limited to, procedures to control pollution resulting from construction activities, flood plain management controls,

wetland protection measures, BMPs for new subdivisions and emergency spill response programs. The description may address controls established under state law as well as local requirements.

- B. A description of the existing program to identify illicit connections to the municipal storm sewer system. The description should include inspection procedures and methods for detecting and preventing illicit discharges and describe areas where this program has been implemented; and
- 6. Fiscal resources. A description of the financial resources currently available to the municipality to complete Part 2 of the permit application. A description of the municipality's budget for existing storm water programs, including an overview of the municipality's financial resources and budget, including overall indebtedness and assets and sources of funds for storm water programs; and
- (B) Part 2 of the application shall consist of—
- 1. Adequate legal authority. A demonstration that the applicant can operate pursuant to legal authority established by statute, ordinance or series of contracts which authorizes or enables the applicant(s), at a minimum, to—
- A. Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by storm discharges associated with industrial activity and the quality of storm water discharged from sites of industrial activity;
- B. Prohibit through ordinance, order or similar means illicit discharges to the municipal separate storm sewer;
- C. Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping or disposal of materials other than storm water;
- D. Control through interagency agreements among copetitioners the contribution of pollutants from one (1) portion of the municipal system to another portion of the municipal system;
- E. Require compliance with terms and conditions in ordinances, permits, contracts or orders; and
- F. Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer;
- 2. Source identification. The location of any major outfall that discharges to waters of

the state that was not reported under paragraph (4)(A)3. of this rule. Provide an inventory and a description (such as SIC codes) which best reflect the principal products or services provided by each facility which may discharge storm water associated with industrial activities to the municipal separate storm sewer:

- 3. Characterization data. When quantitative data for a pollutant are required under subparagraph (4)(B)3.A. of this rule, the applicant must collect a sample of effluent in accordance with 40 CFR 122.21(g)(7) and analyze it for the pollutant in accordance with analytical methods approved under 40 CFR, Part 136. When no analytical method is approved, the applicant may use any suitable method, but must provide a description of the method. The applicant must provide information characterizing the quality and quantity of discharges covered in the permit application including:
- A. Quantitative data from representative outfalls or field screening points designated by the director (based on information received in Part 1 of the application, the director shall designate between five (5) and ten (10) outfalls or field screening points as representative of the commercial, residential and industrial land use activities of the drainage area contributing to the system or, where there are less than five (5) outfalls covered in the application, the director shall designate all outfalls or field screening points) developed as follows:
- (I) For each outfall or field screening point designated under this part, samples shall be collected of storm water discharges from three (3) storm events occurring at least one (1) month apart;
- (II) A narrative description shall be provided of the date and duration of the storm event(s) sampled, rainfall estimates of the storm event which generated the sampled discharge and the duration between the storm event sampled and the end of the previous measurable (greater than one-tenth inch (0.1") rainfall) storm event;
- (III) For samples collected and described under parts (4)(B)3.A.(I) and (II) of this rule, quantitative data shall be provided for the organic pollutants listed in Table II; the pollutants listed in Table III (toxic metals, cyanide and total phenols) of Appendix D of 40 CFR, Part 122 and for the following pollutants:
  - (a) TSS;
  - (b) Total dissolved solids (TDS);
  - (c) COD;
  - (d) (BOD<sub>5</sub>);
  - (e) Oil and grease;
  - (f) Fecal coliform;

- (g) Fecal streptococcus;
- (h) pH;
- (i) Total Kjeldahl nitrogen;
- (j) Nitrate plus nitrite;
- (k) Dissolved phosphorus;
- (I) Total ammonia plus organic nitrogen; and
  - (m) Total phosphorus; and
- (IV) Additional limited quantitative data required by the director for determining permit conditions. The director may require that quantitative data shall be provided for additional parameters and may establish sampling conditions such as the location, season of sample collection, form of precipitation (snow melt, rainfall) and other parameters necessary to ensure representativeness:
- B. Estimates of the annual pollutant load of the cumulative discharges to waters of the state from all identified municipal outfalls or field screening points and the event mean concentration of the cumulative discharges to waters of the state from all identified municipal outfalls or field screening points during a storm event as described under paragraphs (4)(A)3. and (4)(B)2. for BOD<sub>5</sub>, COD, TSS, dissolved solids, total nitrogen, total ammonia plus organic nitrogen, total phosphorus, dissolved phosphorus, cadmium, copper, lead and zinc. Estimates shall be accompanied by a description of the procedures for estimating constituent loads and concentrations, including any modeling, data analysis and calculation methods;
- C. A proposed schedule to provide estimates for each major outfall or field screening point identified in either paragraph (4)(A)3. or (4)(B)2. of this rule of the seasonal pollutant load and of the event mean concentration of a representative storm for any constituent detected in any sample required under subparagraph (4)(B)3.A. of this rule; and
- D. A proposed monitoring program for representative data collection for the term of the permit that describes the location of outfalls or field screening points to be sampled (or the location of instream stations), why the location is representative, the frequency of sampling, parameters to be sampled and a description of sampling equipment:
- 4. Proposed management program. A proposed management program covers the duration of the permit. It shall include a comprehensive planning process which involves public participation and where necessary intergovernmental coordination to reduce the discharge of pollutants to the maximum extent practicable using BMPs, control techniques and system, design and engineering methods and other provisions which are

appropriate. The program also shall include a description of staff and equipment available to implement the program. Separate proposed programs may be submitted by each copetitioner. Proposed programs may impose controls on a system-wide basis, a watershed basis, a jurisdiction basis or on individual outfalls. Proposed programs will be considered by the director when developing permit conditions to reduce pollutants in discharges to the maximum extent practicable. Proposed management programs shall describe priorities for implementing controls. These programs shall be based on—

- A. A description of structural and source control measures to reduce pollutants from runoff from commercial and residential areas that are discharged from the municipal storm sewer system that are to be implemented during the life of the permit, accompanied with an estimate of the expected reduction of pollutant loads and a proposed schedule for implementing the controls. At a minimum, the description shall include:
- (I) A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers;
- (II) A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. The plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed;
- (III) A description of practices for operating and maintaining public streets, roads and highways and procedures for reducing the impact on receiving waters of discharges from municipal storm sewer systems, including pollutants discharged as a result of deicing activities;
- (IV) A description of procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies and that existing structural flood control devices have been evaluated to determine if retrofitting the device to provide additional pollutant removal from storm water is feasible;
- (V) A description of a program to monitor pollutants in runoff from operating or closed municipal landfills or other treatment, storage or disposal facilities for municipal waste which shall identify priorities and procedures for inspections and establishing and implementing control measures for the discharges. This program can be coordinated

with the program developed under subparagraph (4)(B)4.D. of this rule; and

- (VI) A description of a program to reduce to the maximum extent practicable pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer which will include, as appropriate, controls such as educational activities, permits, certifications and other measures for commercial applicators and distributors and controls for application in public right-of-ways and at municipal facilities;
- B. A description of a program, including a schedule, to detect and remove (or require the discharger to the municipal separate storm sewer to obtain a separate state operating permit) illicit discharges and improper disposal into the storm sewer. The proposed program shall include:
- (I) A description of a program including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the municipal separate storm sewer system. This program description shall address all types of illicit discharges, however the following categories of nonstorm water discharges or flows shall be addressed where the discharges are identified by the municipality as sources of pollutants to waters of the state: water line flushing, landscape irrigation, diverted stream flows, rising groundwaters, uncontaminated groundwater infiltration to separate storm sewers, uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air-conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges and street wash water. Program descriptions shall address discharges or flows from fire fighting only where the discharges or flows are identified as significant sources of pollutants to waters of the state:
- (II) A description of procedures to conduct ongoing field screening activities during the life of the permit, including areas or locations that will be evaluated by field screens;
- (III) A description of procedures to be followed to investigate portions of the separate storm sewer system that, based on the results of the field screen, or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of nonstorm water. These procedures may include: sampling procedures for constituents such as fecal coliform, fecal streptococcus, surfactants (MBAS), residual chlo-

- rine, fluorides and potassium; and testing with fluorometric dyes or conducting instorm sewer inspections where safety and other considerations allow. The description shall include the location of storm sewers that have been identified for the evaluation;
- (IV) A description of procedures to prevent, contain and respond to spills that may discharge into the municipal separate storm sewer:
- (V) A description of a program to promote, publicize and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from municipal separate storm sewers:
- (VI) A description of educational activities, public information activities and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials; and
- (VII) A description of controls to limit infiltration of seepage from municipal sanitary sewers to municipal separate storm sewer systems where necessary;
- C. A description of a program to monitor and control pollutants in storm water discharges to municipal systems from municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to Section 313 of Title III of SARA and industrial facilities that the municipal permit applicant determines are contributing a substantial pollutant loading to the municipal storm sewer system. The program shall—
- (I) Identify priorities and procedures for inspections and establishing and implementing control measures for the discharges; and
- (II) Describe a monitoring program for storm water discharges associated with the industrial facilities identified in this part to be implemented during the term of the permit, including the submission of quantitative data on the following constituents: any pollutants limited in effluent guidelines subcategories, where applicable; any pollutant listed in an existing state operating permit for a facility; oil and grease, COD, pH, BOD<sub>5</sub>, TSS, total phosphorus, total Kjeldahl nitrogen, nitrate plus nitrite nitrogen and any information on parameters that are believed to be present listed on the Clean Water Commission Application Form 105D; and
- D. A description of a program to implement and maintain structural and non-structural best management practices to reduce pollutants in storm water runoff from construction sites to the municipal storm sewer system which shall include:

- (I) A description of procedures for site planning which incorporate consideration of potential water quality impacts;
- (II) A description of requirements for nonstructural and structural BMPs;
- (III) A description of procedures for identifying priorities for inspecting sites and enforcing control measures which consider the nature of the construction activity, topography and the characteristics of soils and receiving water quality; and
- (IV) A description of appropriate educational and training measures for construction site operators;
- 5. Assessment of controls. Estimated reductions in loadings of pollutants from discharges of municipal storm sewer constituents from municipal storm sewer systems expected as the result of the municipal storm water quality management program. The assessment also shall identify known impacts of storm water controls on groundwater;
- 6. Fiscal analysis. For each fiscal year to be covered by the permit, a fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to accomplish the activities of the programs under paragraphs (4)(B)3. and 4. of this rule. The analysis shall include a description of the source of funds that is proposed to meet the necessary expenditures, including legal restrictions on the use of the funds;
- 7. Where more than one (1) legal entity submits an application, the application shall contain a description of the roles and responsibilities of each legal entity and procedures to ensure effective coordination;
- 8. Where requirements under paragraphs (4)(A)3. and 4. and (4)(B)2. and 3. of this rule are not practicable or are not applicable, the director may exclude any operator of a discharge from a municipal separate storm sewer which is designated under paragraph (1)(C)10. or 14. of this rule from these requirements. The director shall not exclude Independence, Kansas City, Springfield and St. Louis from any of the permit application requirements under this paragraph, except where authorized under section (4) of this rule;

#### 9. Petitions.

- A. Any operator of a municipal separate storm sewer system may petition the director to require a separate state operating permit for any discharge into the municipal separate storm sewer system.
- B. Any person may petition the director to require a state operating permit for a discharge which is composed entirely of storm water which contributes to a violation of a water quality standard or is a significant

contributor of pollutants to waters of the state.

- C. The owner or operator, or both, of a municipal separate storm sewer system may petition the director to reduce the census estimates of the population served by the separate system to account for storm water discharged to combined sewers that is treated in a publicly-owned treatment works. In municipalities in which combined sewers are operated, the census estimates of population may be reduced proportional to the fraction of the length of combined sewers over the sum of the length of combined sewers and municipal separate storm sewers and an applicant has submitted the state operating permit number associated with each discharge point and a map indicating areas served by combined sewers and the location of any combined sewer overflow discharge point.
- D. Any person may petition the director for the designation of a large or medium municipal separate storm sewer system as defined by paragraph (1)(C)10. or 14. of this rule.
- E. The director shall make a final determination on any petition received under subparagraph (4)(B)9.C. within ninety (90) days after receiving the petition; and
- 10. Municipal separate storm sewer system reports. The operator of a large or medium municipal separate storm sewer system or a municipal separate storm sewer that has been designated by the director under paragraph (1)(C)10. or 14. must submit an annual report by the anniversary of the date of the issuance of the permit for the system. The report shall include:
- A. The status of implementing the components of the storm water management program that are established as permit conditions;
- B. Proposed changes to the storm water management programs that are established as permit conditions;
- C. Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application;
- D. A summary of data, including monitoring data, that is accumulated throughout the reporting year;
- E. Annual expenditures during reporting period and budget for year following each annual report;
- F. A summary describing the number and nature of enforcement actions, inspections and public education programs; and
- G. Identifications of water quality improvements or degradation.

- (5) Permit Requirements.
- (A) The director may issue a general permit for storm water discharges in accordance with the following:
- 1. The general permit shall be written to cover a category of discharges described in the permit except those covered by individual permits within a geographic area. The area shall correspond to existing geographic or political boundaries, such as—
- A. Designated planning areas under Sections 208 and 303 of the Federal Clean Water Act;
- B. City, county or state political boundaries or special sewer districts chartered by the state;
  - C. State highway systems; and
- D. Any other appropriate division or combination of boundaries;
- 2. The general permit shall be written to regulate a category of point sources if the sources all—
- A. Involve the same or substantially similar types of operations;
- B. Discharge the same types of wastes;
- C. Require the same operating conditions:
- D. Require the same or similar monitoring; and
- E. In the opinion of the director, are more appropriately controlled under a general permit than under individual permits;
- 3. General permits may be issued, modified, revoked and reissued or terminated in accordance with applicable requirements of this rule and the permit. To be included under a general permit, a permittee must submit an application on forms supplied by the department;
- 4. The director may require any person authorized by a general permit to apply for and obtain an individual operating permit. Any interested person may petition the director to require a permittee to apply for an individual permit. Cases where an individual operating permit may be required include, but are not limited to the following:
- A. Effluent limitation guidelines are promulgated for point sources covered by a general state operating permit;
- B. The discharge(s) is a significant contributor of pollutants. In making this determination, the director may consider the following factors:
- (I) The location of the discharge with respect to waters of the state;
  - (II) The size of the discharge;
- (III) The quantity and nature of the pollutants discharged to waters of the state; and
  - (IV) Other relevant factors;

- C. The discharge(s) is a significant contributor of pollution which impairs the beneficial uses of the receiving stream;
- D. The discharger is not in compliance with the conditions of the general operating permit; or
- E. A water quality management plan containing requirements applicable to point sources is approved;
- 5. Any owner or operator authorized by a general permit may request to be excluded from the coverage of the general permit by applying for an individual permit. The owner or operator shall submit an application with reasons supporting the request to the director. The request shall be granted by issuing an individual permit if the reasons cited by the owner or operator are adequate to support the request.
- A. When an individual operating permit is issued to an owner or operator otherwise subject to a general operating permit, the applicability of the general permit to the individual operating permittee is automatically terminated on the effective date of the individual permit.
- B. A source excluded from a general permit solely because it already has an individual permit may request that the individual permit be revoked and that it be issued a general permit. Upon revocation of the individual permit and issuance of the general permit to the permittee, the general permit shall apply to the source. The source shall be included under the general permit only if it meets all the requirements for coverage under the general permit;
- 6. Petitions may be submitted to the director requesting the development of a general permit for a group of facilities or activities meeting the criteria listed in paragraph (5)(A)1.
- A. Information required in a petition must include:
- (I) A full description of the group including names, addresses and locations and the industrial activities conducted by group members:
- (II) Any significant materials stored, used, loaded, unloaded, treated or disposed outdoors at these facilities;
- (III) The existence and permit status of any other wastewater discharges from the group;
- (IV) Analytical data which exists for any group members' storm water runoff;
- (V) A summary of the history of spills, leaks and complaints relating to significant materials used, stored, treated or disposed of on these facilities; and

- (VI) Management practices used to prevent or minimize materials contacting storm water.
- B. Within ninety (90) days of receipt of the petition, the director shall notify applicant that—
- (I) A general permit will be developed;
- (II) A general permit will not be developed and reason; or
- (III) Further information is required to make a decision; and
- C. If the director has indicated that a general permit will be developed for specific facilities/activities, application for general permit as indicated in 10 CSR 20-6.010(13) may be submitted in lieu of an individual industrial storm water runoff permit application.
- 7. General permits shall contain BMP requirements and/or monitoring and reporting requirements to keep the storm water from becoming contaminated;
- 8. A general permit will be issued to cover the geographical area of any city or county government that has a land disturbance program in place that has been approved by the department. The general permit will require that the person(s) disturbing the land comply with the conditions of the locally-approved land disturbance program. Permittees who wish to be covered by this general permit and who comply with the locally-approved program must submit a state general permit and a one hundred fifty dollar (\$150) permit fee to the department. Receipt of the application and fee shall fulfill the state permit requirements for the applicant. In the event the approval of the land disturbance program is withdrawn by the department, all activities started after the withdrawal must be permitted under either a site specific permit or a statewide general permit that covers the activity if one exists; and
- 9. A general permit will be issued to cover the geographical area of any city, county or state government agency that performs or contracts for land disturbance activities, if the agency has a storm water control program approved by the department. The general permit will be issued for all activities that are conducted within the geographic area under contract by, or performed by, the city, county or state agency. The applicant will need only to secure one (1) general permit for all activities that occur during the life of the permit. In the event the approval of the land disturbance program is withdrawn by the department, all activities started after the withdrawal must be permitted under either a site specific permit or a statewide general permit that covers the activity if one exists.

- (B) Site specific industrial permits issued pursuant to this rule shall contain the following:
- 1. Identification of the permit holder; and
- 2. Effluent limitation if necessary to protect waters of the state. The limitation shall be based on one (1) or more of the following:
- A. The application and information filed by the permittee;
- B. Effluent guidelines promulgated by the department or Environmental Protection Agency for the facility;
- C. Best professional judgment of the permit writer;
- D. A water quality determination made by the department; or
- E. BMP requirements that are proposed in city-wide management programs;
- 3. Monitoring and reporting requirements; and
- 4. A schedule of compliance and interim limitations allowing up to three (3) years from permit issuance to gain compliance with the effluent limitation.
- (C) Site specific permits for system-wide or jurisdiction-wide separate storm sewers shall contain the following:
  - 1. Identification of the permit holder;
- 2. BMP requirements that are proposed and approved in the city-wide management program; and
- 3. Monitoring and reporting requirements.
  - (D) Terms and Conditions of Permits.
- 1. All storm water discharges shall be consistent with the terms and conditions of the storm water permits.
- 2. For the purpose of inspecting, monitoring or sampling the point source, water contaminant source or storm water treatment facility for compliance with the Clean Water Law and these rules, the owner or operator of the land disturbance site shall allow authorized representatives of the department upon presentation of credentials and at reasonable times to—
- A. Enter upon the premises in which a point source, water contaminant source or storm water treatment facility is located, or in which any records are required to be kept under terms and conditions of the storm water permit;
- B. Have access to or copy any records required to be kept under terms and conditions of the storm water permit;
- C. Inspect any monitoring equipment or monitoring method required in the storm water permit;
- D. Inspect any collection, treatment or land application facility covered under the

storm water permit; and

- E. Sample any storm water at any point in the collection system or treatment process.
- 3. Any expansions or modifications which will result in new or different characteristics must be reported sixty (60) days before the storm water modification begins. Notification may be accomplished by application for a new storm water permit, or if the change will not significantly alter limitations specified in the permit, by submission of notice to the department of the change.
- 4. All reports required by the department shall be signed by a person designated in 10 CSR 20-6.010 or a duly authorized representative under 10 CSR 20-6.010.
- 5. Other terms and conditions shall be incorporated into the storm water permits if the department determines they are necessary to assure compliance with the Clean Water Law and regulations.

AUTHORITY: sections 644.026, RSMo Supp. 1990 and 644.036, RSMo 1986.\* Original rule filed July 15, 1991, effective Oct. 1, 1992

\*Original authority: 644.026, RSMo 1972, amended 1973, 1987 and 644.036, RSMo 1972, amended 1973.

## INSTRUCTIONS FOR FILLING OUT APPLICATION FOR DISCHARGE PERMIT FORM D - PRIMARY INDUSTRIES

All blanks must be filled in when the application is submitted to the Missouri Department of Natural Resources - Division of Environmental Quality, P.O. Box 176, Jefferson City, MO 65102. The form must be signed as indicated.

This application is to be completed only for wastewater facilities from which there is a discharge. Include any facility which it is possible to discharge from even if normally there is no discharge. If this form is not adequate for you to describe your existing operation, then sufficient information should be attached so that an evaluation of the discharge can be made.

1.00 Name of Facility - By what title or name is this facility known locally?

## 1.10 & 1.20 Self-explanatory

CONCENTRATION

1.30 GENERAL INSTRUCTIONS. For some pollutants, you may be required to mark "X" in the "Testing Required" column (column 2-a) and test (sample and analyze) and report the levels of the pollutants in your discharge whether or not you expect them to be present in your discharge. For all others, you must mark "X" in either the "Believe Present" column or the "Believe Absent" column (column 2-b or 2-c) based on your best estimate, and test for those which you believe to be present.

Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, maintenance chemicals, intermediate and final products and byproducts, and any previous analyses known to you of your effluent or of any similar effluent. (For example, if you manufacture pesticides, you should expect those pesticides to be present in contaminated stormwater runoff.) If you would expect a pollutant to be present solely as a result of its presence in your intake water, you must mark "Believe Present" but you are not required to analyze for that pollutant. Instead, mark an "X" in the "Intake" column.

REPORTING. All levels must be reported as concentration and as total mass. You may report some or all of the required data by attaching separate sheets of paper instead of filling out Table II if the separate sheets contain all the required information in a format which is consistent with Table II in spacing and in identification of pollutants and columns. (For example, the data system used in your GC/MS analysis may be able to print data in the proper format.) Use the following abbreviations in the columns headed "Units". (column 4)

OUNDENTICATION	12.00			
ppmparts per million mg/lmilligrams per liter ppbparts per billion	lbspounds tontons (English tons) mgmilligrams			
ug/1micrograms per liter	ggrams kgkilgrams Ttonnes (metric tons)			

MASS

If you measure only one daily value, complete only the "Maximum Daily Values" columns and insert "1" into the "Number of Analyses" columns (columns 3-a and 3-d). Missouri Department of Natural Resources may require you to conduct additional analyses to further characterize your discharges.

For composite samples, the daily value is the total mass or average concentration found in a composite sample taken over the operating hours of the facility during a 24 hour period; for grab samples, the daily value is the arithmetic or flow-weighted total mass or average concentration found in a series of at least four grab samples taken over the operating hours of the facility during a 24 hour period.

If you measure more than one daily value for a pollutant, determine the average of all values within the last year and report the concentration and mass under the "Long Term Average Values" column (column 3-c), and the total number of daily values under the "Number of Analyses" column (column 3-d). Also, determine the average of all daily values taken during each calendar month, and report the highest average under the "Maximum 30 Day Value" column (column 3-b).

SAMPLING. The collection of the samples for the reported analysis should be supervised by a person experienced in performing sampling of industrial wastewater. You may contact your Missouri Department of Natural Resources' Regional Office for detailed guidance on sampling techniques and for answers to specific questions. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding times, the collection of duplicate samples, etc. The time when you sample should be representative of your normal operation, to the extent feasible, with all processes which contribute wastewater in normal operation, and with your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for the collection of a representative sample.

Grab and composite samples are defined as follows:

GRAB SAMPLE. An individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.

COMPOSITE SAMPLE. A combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24 hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.

ANALYSIS. You must use test methods promulgated in 40 CFR Part 136; however, if none has been promulgated for a particular pollutant, you may use any suitable method for measuring the level of the pollutant in your discharge provided that you submit a description of the method or a reference to a published method. Your description should include the sample holding times, preservation techniques, and the quality control measures which you used.

If you have two or more substantially indentical outfalls, you may request permission from the Department of Missouri Natural Resources to sample and analyze only one outfall and submit the results of the analysis for other substantially identical outfalls. If your request is granted by the Missouri Department of Natural Resources, on a separate sheet attached to the application form identify which outfall you did test, and describe why the outfalls which you did not test are substantially identical to the outfall which you did test.

REPORTING OF INTAKE DATA. You are not required to report data under the "Intake" columns unless you wish to demonstrate your eligibility for a "net" effluent limitation for one or more pollutants, that is, an effluent limitation adjusted by subtracting the average level of the pollutant(s) present in your intake water. NPDES regulations allow net limitations only in certain circumstances. To demonstrate your eligibility, under the "Intake" columns report the average of the results of analyses on your intake water (if your water is treated before use, test the water after it is treated), and attach a separate sheet containing the following for each pollutant:

- 1. A statement that the intake water is drawn from the body of water into which the discharge is made. (Otherwise, you are not eligible for net limitations.)
- 2. A statement of the extent to which the level of the pollutant is reduced by treatment of your wastewater. (Your limitations will be adjusted only to the extent that the pollutant is not removed.)
- 3. When applicable (for example, when the pollutant represents a class of compounds), a demonstration of the extent to which the pollutants in the intake vary physically, chemically, or biologically from the pollutants contained in your discharge. (Your limitations will be adjusted only to the extent that the intake pollutants do not vary from the discharged pollutants.)

SPECIFIC INSTRUCTIONS. Table A lists the 34 "primary" industry categories in the left-hand column. For each outfall, if any of your processes which contribute wastewater falls into one of those categories, you must mark "X" in "Testing Required" column (column 2-a) and test for: (A) All of the toxic metals, cyanide, and total phenols; and (B) The organic toxic pollutants contained in the gas chromotography/mass spectrometry (GS/MS) fractions indicated in Table A as applicable to your category, unless you qualify as a small business (see below). organic toxic pollutants are listed by GC/MS fractions in Table II in 1.30. example, the Organic Chemicals Industry has an "X" in all four fractions; therefore, applicants in this category must test for all organic toxic pollutants in 1.30. If you are applying for a permit for a privately owned treatment works, determine your testing requirements on the basis of the industry categories of your contributors. When you determine which industry category you are in to find your testing requirements, you are not determining your category for any other purpose and you are not giving up your right to challenge your inclusion in that category (for example, for deciding whether an effluent guideline is applicable) before your permit is issued.

TABLE A - TESTING REQUIREMENTS FOR ORGANIC TOXIC POLLUTANTS INDUSTRY CATEGORY

	GC/MS FRACTION			
INDUSTRY CATEGORY	Volatile	Acid	Base/Neutral	Pesticide
Adhesives and sealants	X	X	X	
Aluminum forming	X	X	X	-
Auto and other laundries	X	X	X	X
Battery manufacturing	X	-	X	
Coal mining	X	X	X	X
Coil coating	X	X	X	-
Copper forming	X	X	X	-
Electric and electronic compounds	X	X	· <b>X</b>	X
Electroplating	X	X	X	-
Explosives manufacturing	X	X	X	-

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